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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,835	03/25/2004	Martin R. Prince	MPK-00407	7946

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EXAMINER
SMITH, RUTH S

ART UNIT	PAPER NUMBER
3737	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,835	PRINCE, MARTIN R.	
	Examiner	Art Unit	
	Ruth S. Smith	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-28 and 30-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-28 and 30-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 7, 2008 has been entered.

Specification

The disclosure is objected to because of the following informalities: The continuing data provided on page one of the specification is incomplete. Applicant should provide the filing dates for the cited applications. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25-28, 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 25 positively recites that the operator provides the input to the imaging unit thereby including the operator as part of the claimed invention. Inclusion of the operator renders the claim non-statutory.

Claim Rejections - 35 USC § 112

Claims 25-28,30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 25, line 9, “the change...” lacks antecedent basis.

Claims 25-28,30 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the imaging unit collecting image data from a periphery of k-space after the image data is collected from a central portion of k-space. The disclosed invention fails to disclose an imaging system that does not include collecting image data from a periphery of k-space after the image data is collected from a central portion of k-space.

Claims 31-45 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: collecting image data from a periphery of k-space after the image data is collected from a central portion of k-space. The disclosed invention fails to disclose an imaging method that does not include collecting image data from a periphery of k-space after the image data is collected from a central portion of k-space.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 25-28,30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,278,892 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28,30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-66 of U.S. Patent No. 5,417,213 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific

orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28,30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-51 of U.S. Patent No. 5,553,619 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28,30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent No. 5,746,208 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging

of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28,30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No. 5,762,065 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28, 30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,243,600 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an

artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28, 30-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,889,072 in view of Evans III et al (5,806,519) or Uber III et al (5,840,026). Although the conflicting claims are not identical, they are not patentably distinct from each other because the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

Claims 25-28,30-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 27-55 of copending Application No. 11/493,055 in view of Evans III et al or Uber III et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging

of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 25-28,30-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 60-79 of copending Application No. 10/808693 in view of Evans III et al or Uber III et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the acquisition of data using a 3D gradient echo imaging sequence would merely involve the selection of one well known type of imaging sequence. Furthermore, the use of a monitoring unit would have been an obvious means for detecting the contrast agent in the region of interest and thereafter initiating collection of image data in view of Evans III et al or Uber III et al. Evans III et al and Uber III et al each disclose a display for allowing an operator to monitor arrival of the contrast agent in an area of interest. It would have been obvious to one skilled in the art that imaging of an artery would require acquisition of data during the arterial phase of contrast enhancement in order to obtain the best images of the artery of interest. The specific orientation of the image and the repetition times used would have been obvious selection of known imaging parameters in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-4745.

/Ruth S. Smith/
Primary Examiner, Art Unit 3737

RSS